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CELEBRATING LEARNING ACHIEVEMENT THROUGH STUDENT SUPPORT AND PROGRESSION.

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Abstract

A child's personality is shaped and sharpened at school where the students get connected to the world of knowledge and hence it becomes important for the teachers to satisfy the students' needs by playing diverse roles. The teachers caters to individualizing instruction by applying learning theories and principles to instruction so as to enable each and every child to realize one's fullest potentials, thereby engaging him in active learning. This study analyzed the Learning Achievement through student support and progression among 85 teacher trainees. The objective of the study was to celebrate learning achievement among the teacher trainees. The hypotheses of the study were tested using statistical techniques. The findings of the study revealed the positive impact of learning achievement through different student support methods. The student support methods used in this survey were: (i) Tutorials (ii) Study Circle (iii) Peer Tutoring (iv) Mobile device Learning (v) Extended Remediation. The findings of the paper highlighted that all the student support methods used in the study were of immense help to the teacher trainees towards learning achievement and better understanding of the concepts.

***Keywords**: student support methods, teacher trainees, learning achievement.*

Introduction: Learning is not a spectator sport. Learning happens in a variety of ways – from conversations, life experiences, personal thoughts, educational courses or working on some projects. The environment which we are immersed has changed drastically thereby engaging

in active learning. Learning becomes fascinating when young people take an active engagement with and responsibility for their own learning, increasing the impact and potential for future development. It has to be a rich engagement of the learner as per his needs. This significantly emphasizes a quest for quality and focusing on certain key areas in the realm of education. In a truly transition phase, we come across an educational set up where the old is becoming obsolete and the new is in the process of emergence and acceptance. Today education depends on quality of people produced and hence has the onus of producing knowledge based society rather than literacy based society and for this education can no longer remain conventional. Education must be student centric and establish a safe environment for students to collaborate, discuss, reflect, provide and receive feedback for further progress. Education today has assumed a bigger challenge towards several dimensions of student participation surpassing the four walls of the institution to the dynamic learning community. Teachers must provide a variety of learning approaches to successfully lead our students through the task of learning so that these differences can be recognized and provided for in every classroom, this could be through lectures, demonstration, or leading students to self discovery. Understanding the different ways that children learn, interact with and process information can help us modify the way we teach so that all students have an equal opportunity to succeed. This paper focussed on extended remediation and tutorials to understand the teacher trainees need and support for further achievements in learning.

This paper attempts to achieve the objective:

1. To analyse the impact of learning achievement through different student support methods.

based on the academic streams (Science/ Arts/Commerce)

based on different age groups(20-25, 25-30, 30-35, 35-40, 40-45)

Literature Review:

Josephine (1996) aimed to investigate students taking responsibility for their own learning with a target population of 120 intermediate and middle school students in 5 classes. The aim of the study was to analyze the probable causes of students' lack of responsibility for their own learning as documented in teachers’ anecdotal records and interviews indicated that lack of higher-order thinking skills, lack of ability to transfer learning, and lack of self-motivation were responsible. This was addressed through intervention such as graphic organizers, problem solving strategies, higher order thinking skills and portfolios to show ownership. The Post-intervention data obtained during cooperative learning activities revealed an increase in

students' taking responsibility for learning and an improvement in students' higher-order and critical thinking skills, problem-solving strategies, and self-evaluation.

McKay, Annette (2000) sought to improve student motivation in order to increase academic performance among eighth graders in an urban community incorporating a variety of cooperative learning and social skill activities. The findings were:

• Post-intervention data indicated an overall improvement in areas such as interest in class content, and academic achievement.

• The incorporation of cooperative learning and multiple intelligence lessons strengthened student motivational levels and academic achievement.

Lori, Diane (2001) describes a program for increasing student reading motivation through the use of cooperative learning activities, differentiating reading instruction, and active reading strategies. The aim of the study was to increase reading motivation through co-operative learning activities. Materials were often picked for students with thought for relevance to their lives and interests. Students lacked the skills required to read rich and engaging books. Books competed with video games, television, and other electronic devices. The strengths and weaknesses of the students' reading abilities were identified. Through the planned lessons these strengths and weaknesses were improved. Reading reluctance decreased. The findings of the Post intervention data indicated an overall improvement in reading skills and motivation when lessons incorporated cooperative learning activities, differentiating reading instructions, and active reading strategies.

Jenna (2006) in this article focuses on enriching, engaging, rigorous, meaningful learning opportunities that are interwoven. In classrooms at various times, teachers find themselves wondering if students are grasping the content. Constructing learning experiences that are based on the multiple intelligences and the standards provides all students with the opportunity to be successful. When it comes to assessment of that learning, educators can use the same concept in designing authentic situations. To demonstrate understanding, learners need to have options so they can show evidence of their learning through the intelligence of their choice. To be a useful assessment, that learning should be applied in a setting that demonstrates understanding.

Lopez, Linda (2008) developed an action research project that was designed to maximize learning for all students by addressing different learning styles and implementing various strategies. The students in the targeted school exhibited difficulty in experiencing academic

success while exposed to conventional teaching strategies. To teach students individually, the teacher researchers used the following strategies: varied multiple intelligence lessons, chunking, tiered assignments, differentiated instruction, and cooperative learning groups. Cooperative learning groups were used weekly and all instruction was delivered by chunking information. Prior to the intervention, students were given direct instruction as a class and then they worked independently. After the interventions were executed, assessments revealed higher than average grades when the teaching methods were varied. The researchers also advocate the use of cooperative learning groups whenever possible.

Jalil, Pasl (2009) sought to shift and strengthen students' positive attitudes towards science learning, self-efficacy towards invention, and achievement. Focusing on an important aspect of student's positive attitude towards learning, their preference (like/dislike) towards independent study with minimal or no teacher interference, which leads to increased learning autonomy, was investigated. The study aimed at stimulating higher thinking levels in learning science using a highly student-centered and constructivist learning approach. The study revealed:

• 73% of the students preferred minimal or no explanation at all, favoring to be left with the challenge of finding out what to do, compared to 20% of the control group, indicating a positive attitude shift in their learning approaches.

• The experimental group achieved slightly more (9.5% difference) than the control group in knowledge-comprehension-level based exam; however, the experimental group scored much higher (63% difference) in challenging exams which required higher thinking levels.

Di Fatta, Jenna, Stephanie (2009) investigated the increasing student learning in mathematics using collaborative teaching strategies. In this study a group of three teachers conducted an action research project to increase their 54 high school students' achievements in mathematics. The study arouse out of a concern by the teacher researchers who noticed a trend of low scores on teacher-made chapter tests and non-completion of daily homework; standardized tests showed that most students scored below average on the mathematics portion, and the number of students having to repeat mathematics courses had increased; students' overall grades in mathematics had dropped, along with their attitudes towards mathematics learning. The project included 40 high school students boys and girls. The teachers' planned three different interventions including incorporating multiple intelligence based lessons, offering positive reinforcement for homework, and involving the students in

more regular group work. The teachers started by having their students participate in a multiple intelligence survey and based their lessons on intelligences most prominent in their classes. To increase homework completion, the teachers rewarded students who completed five consecutive assignments with a free homework pass. The group work took place during homework time in class. Students were divided into groups of four or five based on their ability level and worked as a team on homework and other activities. The teachers gathered data using three different tools which included obtaining average test scores, average homework completion, and student surveys to understand how the collaborative setting affected their learning. They found mixed results from both classes regarding the average test scores and overall, the majority of the students felt that being in a collaborative setting helped to improve their learning in mathematics.

Research Methodology:

To analyse the impact of learning achievement through different student support methods a survey was conducted on 85 teacher trainees,

Based on the age group of which

were between the age group of 20 - 25,

were between the age group 25- 30,

were between the age group 30-35,

were between the age group 35- 40 and

were between the age group 40-45.

Based on the faculty of which

Science faculty - 35 ,

Commerce faculty - 22

Arts faculty - 28

The teacher trainees were asked to rank the different student support methods preferred as effective towards achievement in learning. Each student support methods is given a range from 1 to 5 of which 1 being the least preferred and 5 being the most preferred. The student support methods used in the survey The student support methods used in this survey were: (i) Tutorials (ii) Study Circle (iii) Peer Tutoring (iv) Mobile device Learning (v) Extended Remediation. The data collected was analysed using statistical technique. The mean value for each of the student support methods were analysed. Further it was analysed based on the Faculty and the different age groups. To determine the relative ranking of the student support

methods, the score of the students are transformed to RII values using equation (Tam et,al,2000):

$$RII = \frac{\sum w}{AN}$$

where w is the weightage given to each student support methods by the teacher trainees ranging from 1 to 5, A is the highest weight (i.e. 5 for this study), N is the total number of samples, and RII is the relative important index, $0 \leq RII \leq 1$.

Student Support Methods implemented for the teacher trainees included:

Extended Remediation: The teacher trainees were given support in the form of extended remediation. The teacher trainees who were unable to achieve better understanding of the concepts of learning and also who were low in their academic achievement, were given extra support and remediation. An extended remediation consisted of extra lectures conducted the teacher educator to enhance student progression. The extra lectures were done through discussion, flipped classrooms, blended learning, face to face interaction, problem solving, journal writing, note taking, concept map as study and referencing skills. this made the teacher trainees more confident and help them to have better understanding of the concepts and increase their level of achievement in learning..

Mobile Device Learning: Today the use of mobile phones has become important in every phase of life. hence the use of mobile as device for learning was considered as a the best way t reach to students understanding. The use of whatsapp on the mobile was identified as the main source for knowledge dissemination. A learning hour was identified and the students were in group called the Learning Group during the learning hour, all the students who were a part of this group would be online, incase if some student who couldn't be online will refer to the chat done during his/her absence. the teacher educator would up reading articles on the group chat and ask questions thereon, the students would respond and the teacher would lead and monitor the divisions, incase there was clarification needed by any student the teacher would clarifying the concepts. Basic and small concepts were dealt and students would sincerely devote time for the chat and learning.

Study Circle: The study circle is a group of 4 student s formed by the teacher trainee who have the intention to learn and acquire mastery of a common content. the teacher trainees who were a part of the Study Circle would voluntarily come together, discuss, write, read and

find out more information of the topic, they wish to study. The study circle was an independent group formed without the intervention of the teacher educator and the outcomes of the learning was the group outcome. The study circle followed their own self made designed form of learning and the achievement were as per the needs of the student group.

Peer Tutoring: Peer tutoring is a form of student support method towards achievement in learning, wherein the peers acts as tutors to their fellow peers. The peers who have content mastery of a subject act as tutor and help in teaching the topic to the fellow students who lack clarity in the concept. The process is reversed with other topic and in total all the students acquire mastery of all the content. there is knowledge sharing, making of notes, discussion of the topics, web search and knowledge gathering.

Tutorials: The Tutorials is a modified form of study circle, in a study circle the teacher trainees form a group and discuss on the topics needed for concept clarity and they learn all the topics, but in Tutorials, the teacher trainees form a group and the teacher educator is a part of the group. the teacher educator guides the teacher trainee group, gives them notes for references, clarifies their doubts, instills in them positive study habits, motivates them to learn and gives them additional resources for clarity in understanding. The teacher educator deals with a smaller group of maximum 5 students in a Tutorials, there is one on one interaction among the teacher educator and teacher trainees.

Results and Discussion:

The mean value and RII values and ranking of all student support methods are shown below.

Table 1: The Mean and RII values of Student Support Methods.

Student Support Methods	Mean Value	RII	Ranking
Tutorials	304	0.69	IV
Study Circle	313	0.73	III
Peer Tutoring	301	0.68	V
Mobile device Learning	329	0.76	II
Extended Remediation.	331	0.77	I

The Mean value and RII values of Achievement in Learning through student support methods are indicated in the above table. The RII values are used to rank the Achievement in Learning through student support methods based on their preference towards learning achievement and better understanding of the concepts. The **Extended Remediation** was ranked First and **Peer Tutoring** was ranked Fifth. **Mobile device Learning** was ranked Second, **Study Circle** was ranked Third and **Tutorials** was ranked Fourth.

Table 2: The Mean and RII values of Student Support Methods based on Faculty.

Student Support Methods	Science		Arts		Commerce	
	RII	Ranking	RII	Ranking	RII	Ranking
Tutorials	0.44	V	0.48	V	0.56	V
Study Circle	0.53	IV	0.58	IV	0.70	IV
Peer Tutoring	0.56	III	0.69	II	0.78	III
Mobile device Learning	0.57	II	0.82	III	0.87	II
Extended Remediation.	0.78	I	0.63	I	0.94	I

The Mean value and RII values of Student Support Methods based on Faculty are indicated in the above table. The RII values are used to rank the Student Support Methods based on their preference towards better understanding of the concepts and achievement in learning. Across all the streams Science, Arts and Commerce Faculty, the **Extended Remediation** strategy was ranked First and **Tutorials** was ranked Fifth. **Mobile device Learning** was ranked second by the Science and Commerce while the Arts ranked it third. **Peer Tutoring** was ranked third by science and Commerce while Arts ranked it second. **Study Circle** was ranked fourth by all the three streams- Science, Arts and Commerce.

Table 3: The Mean and RII values of Student support methods based on Age group

Student support Methods	Age group 20 - 25		Age group 25 - 30		Age group 30 - 35		Age group 35 - 40		Age group 40 -45	
	RII	Ranking	RII	Ranking	RII	Ranking	RII	Ranking	RII	Ranking
Tutorials	0.35	V	0.54	V	0.44	V	0.35	IV	0.34	V

Study Circle	0.46	IV	0.56	IV	0.55	III	0.58	II	0.52	III
Peer Tutoring	0.63	III	0.64	III	0.64	II	0.52	III	0.65	II
Mobile device Learning	0.76	II	0.67	II	0.52	IV	0.32	V	0.36	IV
Extended Remediation.	0.88	I	0.82	I	0.8	I	0.71	I	0.70	I

The Mean value and RII values of Student Support Methods based on different age groups are indicated in the above table. The RII values are used to rank the Student Support Methods based on their preference towards achievement in Learning and better understanding of the concepts.

Based on the age group of 20 -25: The **Extended Remediation** method was ranked First and Tutorials was ranked Fifth. Mobile device Learning was ranked Second, Peer Tutoring was ranked Third and Study Circle was ranked Fourth.

Based on the age group of 25 -30: The **Extended Remediation** method was ranked First and Tutorials was ranked Fifth. Mobile device Learning was ranked Second, Peer Tutoring was ranked Third and Study Circle was ranked Fourth.

Based on the age group of 30 -35: The **Extended Remediation** method was ranked First and Tutorials was ranked Fifth. Peer Tutoring was ranked Second, Study Circle was ranked Third and Mobile device Learning was ranked Fourth.

Based on the age group of 35 -40: The **Extended Remediation** method was ranked First and Mobile device Learning was ranked Fifth. Study Circle was ranked Second, Peer Tutoring was ranked Third and Study Tutorials was ranked Fourth.

Based on the age group of 40 -45: The **Extended Remediation** method was ranked First and Tutorials was ranked Fifth. Peer Tutoring was ranked Second, Study Circle was ranked Third and Mobile device Learning was ranked Fourth.

Recommendations:

According to the findings of this paper, **Extended Remediation** is the most effective student support method from the teacher trainees point of view across the different faculty and different age groups. Thus to celebrate achievements in learning a few recommendations are listed:

Encourage teacher trainee to adapt to collaborative forms of learning, engage in group activities, comprising of the right blend of groups (based on faculty and different age groups) this will help in peer mentoring and a care-share approach. Encourage teacher trainee to build an ownership of learning this can be enhanced when we help teacher trainee to construct their own knowledge based on the learning experiences and the learning environment.

Developing high order thinking skills that enrich the teacher trainee potential in learning to a great extent and develop a sense of discernment which hold importance in all spheres of their lives - academic, personal and social. Help teacher trainee to benefit with extended remediation and self help learning methods.

Conclusion: A survey of celebrating achievement in learning through different students support methods towards better understanding of the concepts and achievement in learning has been conducted under the categories based on Faculty and different Age groups. The relative important index (RII) and the overall mean values of all groups under each category was estimated. From the results it has been found out that the **Extended Remediation** was the most effective method from the teacher trainees point of view towards understanding of the concepts and achievement in learning. The least preferred student support method was Peer Tutoring. Recommendation are provided in through different students support methods towards better understanding of the concepts and achievement in learning.

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